

### WYOMING VOLUNTEER FIREMEN'S PENSION FUND

ACTUARIAL VALUATION REPORT FOR THE YEAR BEGINNING JANUARY 1, 2014



April 22, 2014

Board of Trustees

Wyoming Volunteer Firemen's Pension Fund
6101 Yellowstone Road
Suite 500
Cheyenne, WY 82002

Dear Board of Trustees:

#### **Subject:** Actuarial Valuation as of January 1, 2014

We are pleased to present the report of the actuarial valuation of the Wyoming Volunteer Firemen's Pension Fund ("the Fund") for the plan year commencing January 1, 2014. This report describes the current actuarial condition of the Fund, determines the calculated employer contribution amount (the actuarially required amount), and analyzes changes in this contribution amount from the prior year. Valuations are prepared annually, as of January 1, the first day of the Fund's plan year.

#### Financing objectives and funding policy

The employee contribution amounts are specified in statute. The state treasurer shall deposit into the Fund 50% of the gross tax levied upon fire insurance premiums paid to insurance companies for fire insurance in the state. The purpose of this actuarial valuation is to determine whether or not these contribution amounts are sufficient to meet the obligations of the Fund.

#### Progress toward realization of financing objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. The funded ratio, based upon the assumption of no future cost-of-living adjustments as of January 1, 2014 is 92.24%. In the January 1, 2013 valuation, this funded ratio was 93.54%. On a market value of assets basis, the funded ratio improved from 96.06% as of January 1, 2013 to 96.30% as of January 1, 2014.

#### **Benefit provisions**

The benefit provisions reflected in this valuation are those which were in effect on January 1, 2014. W.S. 9-3-454 prohibits benefit changes, including cost-of-living increases, unless the funded ratio stays above 100% plus a margin for adverse experience throughout the life of the benefit change. There were no benefit changes since the prior valuation.

The benefit provisions are summarized in Appendix B of the report.

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#### **Assumptions and methods**

Actuarial assumptions and methods are set by the Board, based upon recommendations made by the plan's actuary. The current assumptions used in the valuation were adopted by the Board effective February 22, 2013. This is the first valuation using the new assumptions.

The results of the actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution amounts and funding periods. The actuarial calculations presented in the report are intended to provide information for rational decision making.

The actuarial assumptions and methods used in this report comply with the parameters for disclosure that appear in Governmental Accounting Standards Board (GASB) Statement Number 25.

All assumptions and methods are described in Appendix A of the report.

#### Data

Member data for retired, active and inactive members was supplied as of January 1, 2014 by the Fund's staff. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data.

Asset and financial information as of January 1, 2014 was prepared by Wyoming Retirement System and is the responsibility of management. McGee, Hearne & Paiz, LLP provided us the asset and financial information and will opine on Wyoming Retirement System's statements.

#### Plan experience

As part of each valuation, we examine the Fund's experience relative to the assumptions. As experience in a given year deviates from the assumptions, a gain occurs if the liabilities grow slower than the assumption set anticipates and a loss occurs if the liabilities grow faster. This past fiscal year the Fund had a total experience gain of approximately \$3,191,383. This gain was mostly due to recognition of the past and current investment gains on assets that the Fund experienced as well as contributions in excess of the ARC. The aggregate results of these analyses are disclosed in Tables 4 & 5 under Section III of the report.

#### **Actuarial certification**

All of the tables contained in this actuarial valuation report were prepared by Gabriel, Roeder, Smith & Company. Historical information for years prior to 2010 was prepared by the prior actuarial firm and was not subjected to our actuarial review. We certify that the information presented herein is accurate and fairly portrays the actuarial position of the Fund as of January 1, 2014.

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All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. The undersigned are independent actuaries and consultants. Mark Randall and Leslie Thompson are Enrolled Actuaries, all of the undersigned are members of the American Academy of Actuaries, and all meet the Qualification Standards of the American Academy of Actuaries. Finally, all of the undersigned are experienced in performing valuations for large public retirement systems.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

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EXECUTIVE SUMMARY

# **Executive Summary**

		January 1, 2014	<b>January 1, 2014</b>	<b>January 1, 2013</b>
	Item	No COLA	No COLA	No COLA
		New Assumptions	Old Assumptions	
1.	Contributions:			
	a. Total normal cost	\$887,996	\$832,895	\$886,007
	b. Employee contributions	(327,300)	(327,300)	(328,200)
	c. Other expected contributions	_	_	
	d. Net employer normal cost	\$560,696	\$505,595	\$557,807
	e. Amortization payment	479,221	83,114	368,598
	f. Administrative expenses	193,500	193,500	220,200
	g. Required contribution	\$1,233,417	\$782,209	\$1,146,605
	h. Estimated premium tax allocation	(1,900,000)	(1,900,000)	(1,500,000)
	i. Shortfall/(surplus)	(\$666,583)	(\$1,117,791)	(\$353,395)
2.	Funding Elements:			
	a. Market value of assets (MVA)	\$71,195,509	\$71,195,509	\$64,146,166
	b. Actuarial value of assets (AVA)	\$68,194,123	\$68,194,123	\$62,461,860
	c. Actuarial accrued liability (AAL)	\$73,930,299	\$69,188,056	\$66,775,348
	d. Unfunded/(overfunded) actuarial accrued liability (UAAL)	\$5,736,176	\$993,933	\$4,313,488
3.	GASB 25/27 Elements:			
	a. Annual required contribution	\$1,233,417	\$782,209	\$1,146,605
	b. Actual contributions	N/A	N/A	2,347,267
	i. Employer	N/A	N/A	-
	ii. Other	N/A	N/A	2,347,267
	c. Percentage contributed	N/A	N/A	204.71%
	d. Funded ratio on an actuarial basis (AVA/AAL)	92.24%	98.56%	93.54%
	e. Funded ratio on an market basis (MVA/AAL)	96.30%	102.90%	96.06%



DISCUSSION

### **Contribution Requirements**

- Exhibits throughout this report are based primarily, unless stated otherwise, on the assumption of no future cost-of-living adjustments (COLA)
- W.S. 9-3-454 prohibits benefit changes, including cost-of-living increases, unless the funded ratio stays above 100% plus a margin for adverse experience throughout the life of the benefit change. The actuarial value funded ratio is 92.24% and the market value funded ratio is 96.30%.
- The estimated State premium tax allocation is \$1.9 million this year, as provided by Wyoming staff.
- Actuarial assumptions and methods were updated since the prior valuation to those adopted February 22, 2013 by the Board. In particular, the assumed rate of return was lowered from 8.00% to 7.75%. All of the changes to the demographic and economic assumptions are detailed in Appendix A
- The amortization payment is based upon the following assumptions:
  - 30-year open funding period
  - Amortization payment amounts are calculated in such a way that they will increase as a level dollar amount.
  - Future growth in the number of active members is not reflected in the annual valuation
- Analysis of the change in contribution amounts is shown in Table 5 under Section III of the report.
- The calculated funding period assuming an annual contribution of \$1.9 million is 6.3 years.

#### **Calculation of Contribution Amounts**

The funds available to pay benefits come from two sources, contributions and investment income on those contributions (the majority of the funds available to pay benefits typically come from investment income). The Fund receives contributions from two sources, state contributions equal to 50% of gross fire insurance premium taxes and member contributions of \$12.50 per month per member. As shown in Table 1 under Section III of the report, the calculated employer contribution amount has three components:

- The normal cost (NC)
- The amortization payment
- The administrative expenses

The NC is the theoretical amount which would be required to pay the members' benefits if this amount had been contributed from each member's entry date and if the fund's experience exactly followed the actuarial assumptions. The NC is shown in Table 1 under Section III of the report.

The actuarial accrued liability (AAL) is the difference between (i) the actuarial present value of all future benefits for all current participants of the fund, including active, inactive and retired members, and (ii) the actuarial present value of future normal costs. Thus the AAL represents the liability associated with past years. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and the actuarial value of assets (AVA). It is the shortfall/excess between the liability associated with prior years (the AAL) and the assets actually accumulated (the AVA). This shortfall/excess can arise from several sources, including actuarial gains and losses which are caused by differences between actual experience and the plan's assumptions, changes to the plan's actuarial assumptions, and amendments to the benefit provisions.

The amortization payment is the amount required to fund this difference. It is the amount, expressed as a level dollar amount, necessary to amortize the UAAL. This amortization is over a period of 30 years. The Executive Summary above shows the Amortization Payment compared to that of last year.

Administrative expenses are the average of the actual expenses for the prior two years, with each year projected at 6.50% to the valuation date.

The calculated amount is used in determining the contributions necessary to meet the GASB Annual Required Contribution (ARC) for the twelve-month period beginning January 1, 2014.

### **Financial Data and Experience**

As of January 1, 2014, the Fund has a total market value of \$71 million. Financial information was received from McGee, Hearne & Paiz, LLP.

Table 7 under Section III of the report shows a reconciliation of the market values between the beginning and end of 2013.

During 2013, the total investment return on the market value of assets (MVA), as reported by NEPC, LLC, was 13.53%, as shown in Table 10 under Section III of the report.

In determining the contribution rates and funded status of the Fund, an actuarial value of assets (AVA) is used rather than the market value of assets. The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses. An adjustment is made if the actuarial value is not within 20% of the Market Value. For any year following a year in which the 20% of market value adjustment was applied, the actuarial value is determined as if the adjustment was not applied in the previous year.

The development of the AVA is shown in Table 9 under Section III of the report. The AVA is \$68 million. The AVA is 95.78% of the MVA as of December 31, 2013, compared to 97.37% last year.

In addition to the market return, Table 10 also shows the return on the actuarial value of assets for the Fund. For 2013, this return was 11.50%. Because this is greater than the prior assumed 8.00% investment return, and actuarial gain occurred decreasing the unfunded actuarial accrued liabilities of the Fund by \$2,164,208. Table 10 shows a historical summary of market and actuarial return rates in recent years.

#### **Member Data**

Member data as of January 1, 2014 was supplied electronically by the Fund's staff. While we did not audit this data, we did perform various tests to ensure that it was internally consistent, consistent with the prior year's data, and was reasonable overall. Table 14 under Section III of the report shows a reconciliation of this member data from the prior valuation date to January 1, 2014.

Table 15 under Section III of the report shows the number of members by category (active, inactive, retired, etc.) along with member statistics. Tables 16 through 24 show summaries of certain historical data and include membership statistics.

Of the 2,182 active participants, 89 are eligible or will become eligible for retirement in 2014.

#### **Benefit Provisions**

Appendix B of the report includes a more detailed summary of the benefit provisions for the Fund. A brief summary is as follows:

- Normal Retirement Eligibility
  - Eligibility varies with entry age according to the following schedule:

Entry Age	Retirement Age	Entry Age	Retirement Age
45 or less	60	56 - 57	66
46 - 47	61	58 - 59	67
48 - 49	62	60 - 61	68
50 - 51	63	62 - 63	69
52 - 53	64	64 - 65	70
54 - 55	65		

- Normal Retirement Benefit
  - A flat monthly dollar amount that varies based on service in accordance with W.S. 35-9-608(d)
- Spouse Benefits
  - In the event of active member or retiree death, the spouse is entitled to a benefit as stated in W.S. 35-9-608(d), which is equal to 66.67% of the retiree benefit. If the surviving spouse dies with children under 21, the benefit for the children is also stated in this table and is equal to 50% of the spouse benefit. There will be a minimum of \$5,000 paid for a given member account.
- Employee Contributions are required
  - \$12.50 per month
- Post-retirement Cost-of-Living Adjustments (COLAs)
  - W.S. 9-3-454 prohibits benefit changes, including cost-of-living increases, unless the funded ratio stays above 100% plus a margin for adverse experience throughout the life of the benefit change.

There have been no changes to plan provisions since the prior valuation.

### **Actuarial Methods and Assumptions**

Appendix A of the report includes a summary of the actuarial assumptions and methods used in this valuation. A few highlights are listed as follows:

- Costs are determined using the Entry Age Normal actuarial cost method, calculated as a level dollar amount.
- The unfunded actuarial accrued liability is amortized over 30 years, calculated as a level dollar amount.
- The assumed annual investment return rate is 7.75%, with assumed inflation of 3.25%.
- Inactive vested participants are assumed to retire at normal retirement eligibility or the valuation date if already eligible to retire.
- No benefit data is available for members entitled to deferred benefits. The present value of benefits expected to be paid to vested inactive non-retired members is approximated using the data provided.

Based on the current mortality tables projected to 2018 to approximate annual changes due to the generational assumption (instead of full generational projections), the average future lifetime for current pensioners is 15.7 years.

Actuarial assumptions and methods were updated since the prior valuation to those adopted February 22, 2013 by the Board.

### **GASB** and Funding Progress

Governmental Accounting Standards Board Statement Number 25 (GASB 25) contains certain accounting requirements for the Fund. In particular, it requires the inclusion of two special schedules in the Fund's annual report:

- 1. Schedule of Funding Progress
- 2. Schedule of Employer Contributions

Information needed to prepare the Schedule of Funding Progress is included in Table 12 under Section III of the report.

Governmental Accounting Standards Board Statement Number 27 (GASB 27) also requires that plans calculate an Annual Required Contribution (ARC), and, if actual contributions received are less than the ARC, this must be disclosed.

Under GASB 27, the ARC must be calculated in accordance with certain parameters. In particular, it must include a payment to amortize the unfunded actuarial accrued liability (UAAL). This amortization payment must be computed using a funding period no greater than 30 years. Further, the amortization payment included in the ARC may be computed as a level dollar amount, or it may be computed as an amount which increases with payroll (level percentage of payroll). However, if payments are computed on a level percentage of payroll approach, the payroll growth assumption may not anticipate future membership growth.

Since the recommended employer contribution amount of \$1,233,417 is computed as a level dollar amount using an amortization period of 30 years from the valuation date, the calculated amount meets the definition of an acceptable ARC.



SUPPORTING EXHIBITS

### **Calculation of Annual Required Contribution**

	Item	January 1, 2014	January 1, 2013
1.	Employer normal cost	\$560,696	\$557,807
2.	Actuarial accrued liability for active members  a. Present value of future benefits for active members  b. Less: present value of future employer normal costs  c. Less: present value of future employee contributions  d. Actuarial accrued liability	\$36,694,767 (2,539,167) (1,812,869) \$32,342,731	\$34,178,760 (2,606,839) (1,903,371) \$29,668,550
3.	Total actuarial accrued liability for:  a. Retirees and beneficiaries  b. Disabled members  c. Inactive members  d. Active members (Item 2d)  e. Total	\$40,826,196 - 761,372 32,342,731 \$73,930,299	\$36,343,660 - 763,138 29,668,550 \$66,775,348
4.	Actuarial value of assets (Table 9)	\$68,194,123	\$62,461,860
<ul><li>5.</li><li>6.</li></ul>	Unfunded actuarial accrued liability (UAAL) (Item 3e - Item 4) Funding period	\$5,736,176 30 years	\$4,313,488 30 years
7.	Assumed payroll growth rate	0.00%	0.00%
8.	<ul> <li>Employer contribution requirement</li> <li>a. UAAL amortization payment</li> <li>b. Employer normal cost</li> <li>c. Administrative expenses</li> <li>d. Contribution requirement (a + b + c)</li> </ul>	\$479,221 560,696 193,500 \$1,233,417	\$368,598 557,807 220,200 \$1,146,605

Cost Breakdown
(Assumes No Future Cost-Of-Living Increases)

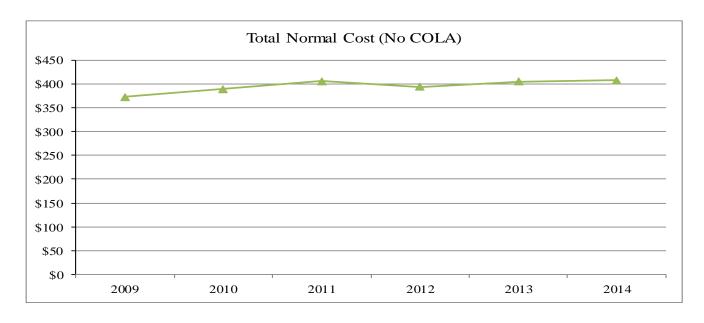
	Present Value of Future	Actuarial Accrued	Total Present Value of
	Normal Costs	Liabilities	Benefits
Item	(1)	(2)	(3) = (1) + (2)
Age and service allowances based on total service and disability benefits likely to be rendered by present active members	\$3,281,060	\$31,764,295	\$35,045,355
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	269,253	258,524	527,777
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	801,723	319,912	1,121,635
Benefits likely to be paid to vested inactive members	-	-	-
Benefits to be paid to members due refunds	-	761,372	761,372
Benefits to be paid to current retirees, disabled members, beneficiaries, and future beneficiaries of current retirees	-	40,826,196	40,826,196
Total	\$4,352,036	\$73,930,299	\$78,282,335
Actuarial value of assets	-	\$68,194,123	\$68,194,123
Liabilities to be covered by future contributions	\$4,352,036	\$5,736,176	\$10,088,212

### **History of Total Normal Cost**

Fiscal Year Ending December 31

Total Normal Cost Per
Active (No COLA)

_	Fiscal Year Ending December 31	Active (No COLA)
_	(1)	(2)
	2009	\$372
	2010	389
	2011	406
	2012	394
	2013	405
	2014	407



### **Calculation of Total Actuarial Gain/(Loss)**

Item	January 1, 2014
1. Derivation of experience gain/(loss)	
a. Unfunded actuarial accrued liability (UAAL) - previous valuation	\$4,313,488
b. Normal cost (NC) for fiscal year ending 12/31/2013	886,007
c. Actual adminstrative expenses for fiscal year ending 12/31/2013	133,749
d. Actuarially determined contribution for fiscal year ending 12/31/2013	1,474,805
e. Interest accrual*:	
(i) For whole year on (a)	345,079
(ii) For half year on (b) $+$ (c) $-$ (d)	(18,202)
(iii) Total interest: $(e)(i) + (e)(ii)$	326,877
f. Change in UAAL due to plan changes	-
g. Change in UAAL due to assumption change	4,742,243
h. Expected UAAL current year: $(a) + (b) + (c) - (d) + (e)(iii) + (f) + (g)$	8,927,559
i. Actual UAAL current year	5,736,176
j. Experience gain/(loss): (h) - (i)	3,191,383
k. Experience gain/(loss) as a % of actuarial accrued liability	4.32%
2. Approximate portion of gain/(loss) due to investments*	
(at actuarial value)	\$2,164,208
(	, , - ,
3. Approximate portion of gain/(loss) due to contributions*	
higher or lower than expected	\$1,262,723
4. Approximate portion of gain/(loss) due to liabilities: (1)(j) - (2) - (3)	(\$235,548)
a. Age & service retirements	181,185
b. Death-in-service	122,364
c. Withdrawal from employment	(135,403)
d. Rehires	(247,577)
e. Death after retirement	(132,562)
f. Other	(23,554)
g. Other as a % of actuarial accrued liability	-0.03%

<sup>\*</sup> The interest accrual of 8.00% is used for the period January 1, 2013 through December 31, 2013. Effective January 1, 2014, the assumed interest rate is 7.75%.

### **Change in Calculated Contribution Amount Since the Prior Valuation**

Item	January 1, 2014
1. Coloulated contribution amount as of January 1, 2012	¢1 146 605
1. Calculated contribution amount as of January 1, 2013	\$1,146,605
2. Change in contribution rate during year	
a. Change in total normal cost	\$1,989
b. Assumption changes	394,564
c. Recognition of prior asset losses (gains)	(127,762)
d. Actuarial (gain) loss from current year asset performance	(57,176)
e. Actuarial (gain) loss from liability sources and adminstrative expenses	(14,549)
f. Difference between contributions made and required contributions	(107,004)
g. Open amortization period reset to 30 years	(3,250)
h. Other changes	
i. Total change	\$86,812
3. Calculated contribution amount as of January 1, 2014	\$1,233,417

## **Statement of Plan Net Assets**

Assets at Market Value							
Item FYE 2013 FYE 2012							
1. Cash and cash equivalents (operating cash)	\$2,449,854	\$2,874,414					
2. Receivables							
a. Insurance premium tax	\$828,912	\$844,869					
b. Employee contributions	27,325	238					
c. Securities sold	306,389	157,724					
d. Accrued interest and dividends	222,478	157,137					
e. Currency contract receivable	9,248,201	1,520,955					
f. Other	0	0					
g. Rebate and fee income receivable	0	0					
h. Total receivables	\$10,633,305	\$2,680,923					
3. Investments, at fair value	\$76,293,011	\$66,828,122					
4. Liabilities							
a. Benefits and refunds payable	-	(\$1,782)					
b. Securities purchased	(936,522)	(1,090,082)					
c. Administrative and consulting fees payable	(119,067)	(94,140)					
d. Currency contract payable	(9,295,268)	(1,517,384)					
e. Securities lending collateral	(7,829,804)	(5,533,905)					
f. Total liabilities	(\$18,180,661)	(\$8,237,293)					
5. Total market value of assets available for benefits	\$71,195,509	\$64,146,166					

## **Reconciliation of Plan Net Assets**

	Assets at Market Value				
	Item	FYE 2013	FYE 2012		
A.	Market value of assets at beginning of year	\$64,146,166	\$58,352,305		
В.	Contribution income:				
	1. Contributions				
	a. Employee	\$341,695	\$321,499		
	b. Employer	-	-		
	c. Other	2,347,267	1,511,826		
	d. Total	\$2,688,962	\$1,833,325		
	2. Investment income				
	a. Interest, dividends, and other income	\$1,665,403	\$1,616,371		
	b. Write-up of assets	7,121,238	6,467,461		
	c. Investment expenses	(402,913)	(270,073)		
	d. Net investment income	\$8,383,728	\$7,813,759		
	3. Securities lending				
	a. Gross income	\$46,527	\$49,698		
	b. Deductions	(6,976)	(7,452)		
	c. Net investment income	\$39,551	\$42,246		
	4. Benefits and refunds				
	a. Refunds	(\$59,785)	(\$82,766)		
	b. Regular monthly benefits	(3,869,364)	(3,597,151)		
	c. Total	(\$3,929,149)	(\$3,679,917)		
	5. Administrative and miscellaneous expenses	(\$133,749)	(\$215,552)		
C.	Market value of assets at end of year	\$71,195,509	\$64,146,166		

### **Progress of Fund Through December 31, 2013**

Plan Year				Net			
Ending	<b>Employer</b>	<b>Employee</b>	Administrative	Investment	Benefit		<b>Actuarial Value</b>
December 31	Contributions*	Contributions	Expenses	Income**	<b>Payments</b>	Transfers	of Assets
Total	\$20,605,484	\$4,824,698	(\$1,695,621)	\$40,704,251	(\$33,053,491)	-	
2000	\$942,898	\$325,348	(\$53,269)	\$5,702,055	(\$979,598)	-	\$42,746,236
2001	995,498	335,959	(87,919)	4,239,600	(1,131,899)	-	47,097,475
2002	886,722	352,588	(97,590)	(710,314)	(1,378,187)	_	46,150,694
2003	1,599,882	345,709	(94,390)	3,867,635	(1,556,933)	-	50,312,597
2004	1,471,932	347,592	(113,717)	1,546,671	(1,730,846)	-	51,834,229
2005	1,484,406	338,705	(200,280)	2,758,924	(1,917,814)	-	54,298,170
2006	1,418,209	348,523	(106,738)	4,631,670	(2,121,659)	-	58,468,175
2007	1,688,766	351,442	(72,836)	6,504,026	(2,393,734)	-	64,545,839
2008	1,515,607	334,638	(105,763)	(8,174,877)	(2,753,750)	-	55,361,694
2009	1,494,517	385,611	(106,079)	9,719,041	(3,014,775)	-	63,840,009
2010	1,598,736	359,534	(121,887)	1,712,634	(3,117,539)	-	64,271,487
2011	1,649,218	335,855	(185,852)	619,002	(3,347,691)	-	63,342,019
2012	1,511,826	321,499	(215,552)	1,181,985	(3,679,917)	-	62,461,860
2013	2,347,267	341,695	(133,749)	7,106,199	(3,929,149)	-	68,194,123

<sup>\* 50%</sup> of the gross fire insurance premium taxes from fire insurance policies written in Wyoming

<sup>\*\*</sup> Net of investment expenses

### **Development of Actuarial Value of Assets**

Item	FYE 2013	FYE 2012
1. Actuarial value of assets, beginning of year (before corridor)	\$62,461,860	\$63,342,019
2. Market value, end of year	\$71,195,509	\$64,146,166
3. Market value, beginning of year	\$64,146,166	\$58,352,305
4. Non-investment/administrative net cash flow:		
a. Employee contributions	\$341,695	\$321,499
b. Employer contributions	-	-
c. Other contributions	2,347,267	1,511,826
d. Refund of employee accounts	(59,785)	(82,766)
e. Retirement benefits	(3,869,364)	(3,597,151)
f. Administrative expenses	(133,749)	(215,552)
g. Total net cash flow: [sum of (4a) through (4f)]	(\$1,373,936)	(\$2,062,144)
5. Investments and securities lending:	X: , , , ,	, , , ,
a. Interest and dividends on investments	\$1,665,403	\$1,616,371
b. Gross income from securities lending	46,527	49,698
c. Fees and expenses	(409,889)	(277,525)
d. Total net income: [sum of (5a) through (5c)]	\$1,302,041	\$1,388,544
6. Investment income:	. 4 4-	. , ,-
a. Actual market return: (2) - (3) - (4g) - (5d)	\$7,121,238	\$6,467,461
b. Assumed rate of return**	8.00%	8.00%
c. Assumed amount of return	3,775,752	3,198,741
d. Amount subject to phase-in: (6a) - (6c)	\$3,345,486	\$3,268,720
7. Phase-in recognition of investment income:	φο,ο .ο, .οο	φε,200,720
a. Current year: 0.20 * (6d)	\$669,097	\$653,744
b. First prior year	653,744	(1,087,306)
c. Second prior year	(1,087,306)	538,376
d. Third prior year	538,376	1,254,495
e. Fourth prior year	1,254,495	(4,764,609)
f. Total recognition	\$2,028,406	(\$3,405,300)
8. Actuarial value of assets, end of year	φ <b>∠,υ∠0,400</b>	(\$5,405,500)
a. Preliminary actuarial value of assets, end of year:		
(1) + (4g) + (5d) + (6c) + (7f)	\$68,194,123	\$62,461,860
b. Upper corridor limit: 120% * (2)	\$85,434,611	\$76,975,399
c. Lower corridor limit: 80% * (2)	\$56,956,407	\$51,316,933
d. Actuarial value of assets, end of year	\$68,194,123	\$62,461,860
9. Difference between market and actuarial value of assets	\$3,001,386	\$1,684,306
10. Actuarial rate of return	11.50%	1.90%
11. Market rate of return*	13.53%	14.05%
12. Ratio of actuarial value to market value of assets	95.78%	97.37%

<sup>\*</sup> Current year market rate of return is based on unaudited data and is supplied by NEPC, LLC.

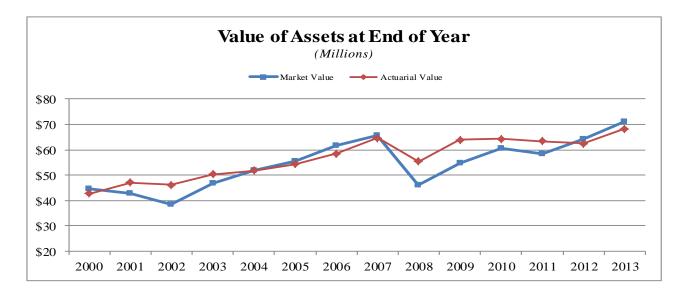


<sup>\*\*</sup> The interest accrual of 8.00% is used for the period January 1, 2013 through December 31, 2013. Effective January 1, 2014, the assumed interest rate is 7.75%.

### **History of Investment Returns**

Plan Year	Market	Actuarial
(1)	(2)	(3)
2000	-0.99%	15.44%
2001	-4.47%	9.91%
2002	-9.29%	-1.51%
2003	21.00%	8.35%
2004	11.54%	3.07%
2005	8.22%	5.34%
2006	12.63%	8.57%
2007	7.44%	11.16%
2008	-29.63%	-12.77%
2009	23.72%	17.75%
2010	13.80%	2.71%
2011	-0.90%	0.97%
2012	14.05%	1.90%
2013	13.53%	11.50%
A vonogo notumos		
Average returns:	10.560/	6.770/
Last five years:	12.56%	6.77%
Last ten years:	6.39%	4.72%

The market rates above were provided by NEPC, LLC, including changes to the 2010 and 2012 rates since the prior valuation. The actuarial rates above are based on the financial information provided by McGee, Hearne & Paiz, LLP.



### **Solvency Test**

Valuation Date	Total Active Member Contributions	Inactive and Pensioner Liability	Employer Financed Active Accrued Liability	Actuarial Value of		ntage of Lia	
January 1	(1)	(2)	(3)	Assets	$\frac{\text{Cov}}{(1)}$	$\frac{\text{cred by As}}{(2)}$	(3)
2005	\$4,464,808	\$20,323,000	\$22,042,000	\$51,834,229	100%	100%	100.0%
2006	4,676,280	22,831,000	24,197,000	54,298,170	100%	100%	100.0%
2007	4,801,436	25,883,000	24,678,000	58,468,175	100%	100%	100.0%
2008	4,890,413	31,398,000	30,611,000	64,545,839	100%	100%	92.3%
2009	4,999,123	34,927,000	32,431,000	55,361,694	100%	100%	47.6%
2010	5,191,786	29,049,496	24,375,252	63,840,009	100%	100%	100.0%
2011	5,235,003	31,405,347	24,785,632	64,271,487	100%	100%	100.0%
2012	5,249,169	33,591,073	24,998,749	63,342,019	100%	100%	98.0%
2013	5,178,077	37,106,798	24,490,473	62,461,860	100%	100%	82.4%
2014	5,186,854	41,587,568	27,155,877	68,194,123	100%	100%	78.9%

Effective January 1, 2010, liabilities are calculated assuming no future cost-of-living increases.

### **Schedule of Funding Progress**

(1)	(1) (2)		$(1) \qquad (2) \qquad (3)$		(4)	(5)	(6)
Valuation Date	Actuarial Value of	Actuarial Accrued Liability	Unfunde d AAL (UAAL)	Funded Ratio	UAAL per Active		
January 1	Assets	(AAL)	[(3) - (2)]	[(2)/(3)]	Member		
2001	\$42,746,236	\$26,950,900	(\$15,795,336)	158.61%	(\$7,458)		
2002	47,097,475	39,355,900	(7,741,575)	119.67%	(3,619)		
2003	46,150,694	40,725,500	(5,425,194)	113.32%	(2,508)		
2004	50,312,597	43,818,100	(6,494,497)	114.82%	(2,914)		
2005	51,834,229	46,830,000	(5,004,229)	110.69%	(2,210)		
2006	54,298,170	51,703,700	(2,594,470)	105.02%	(1,135)		
2007	58,468,175	55,361,800	(3,106,375)	105.61%	(1,368)		
2008	64,545,839	66,899,300	2,353,461	96.48%	1,058		
2009	55,361,694	61,796,500	6,434,806	89.59%	2,861		
2010	63,840,009	58,616,534	(5,223,475)	108.91%	(2,342)		
2011	64,271,487	61,425,982	(2,845,505)	104.63%	(1,275)		
2012	63,342,019	63,838,991	496,972	99.22%	227		
2013	62,461,860	66,775,348	4,313,488	93.54%	1,971		
2014	68,194,123	73,930,299	5,736,176	92.24%	2,629		

Effective January 1, 2010, liabilities are calculated assuming no future cost-of-living increases.

### Schedule of Contributions from the Employer(s) and Other Contributing Entities

(1)	(2)	(3)	(4)
Fiscal Year Ending December 31	GASB No. 25 Annual Required Contribution (ARC)	Employer Contributions*	Percentage of GASB ARC Contributed [(3)/(2)]
2004	\$754,300	\$1,471,932	195.14%
2005	358,300	1,484,406	414.29%
2006	644,200	1,418,209	220.15%
2007	532,000	1,688,766	317.44%
2008	1,007,700	1,515,607	150.40%
2009	1,225,000	1,494,517	122.00%
2010	203,078	1,598,736	787.25%
2011	453,174	1,649,218	363.93%
2012	742,745	1,511,826	203.55%
2013	1,146,605	2,347,267	204.71%
2014	1,233,417	-	-

<sup>\* 50%</sup> of the gross fire insurance premium taxes from fire insurance policies written in Wyoming. Effective January 1, 2010, ARCs are calculated assuming no future cost-of-living increases.

## **Reconciliation of Participant Data**

	Active Participants	Inactive Participants	Retired Participants	Beneficiaries	Total
Number as of January 1, 2013	2,188	1,184	931	175	4,478
New participants	201	19	-	-	220
Vested terminations	(17)	17	-	-	-
Retirements	(77)	(4)	81	-	-
Disability	-	-	-	-	-
Deceased with beneficiary	(1)	-	(13)	14	-
Deceased without beneficiary	(5)	-	(10)	(2)	(17)
Due refunds	(138)	138	-	(1)	(1)
Lump sum payoffs	(9)	(69)	-	-	(78)
Rehires/return to active	40	(40)	-	-	-
Certain period expired	-	-	-	-	_
Reclassifications	-	-	-	-	-
Data corrections	-		1	4	5
Number as of January 1, 2014	2,182	1,245	990	190	4,607

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# **Demographic Statistics**

_	Janua		
_	2014	2013	Delta
Active Participants			
Number	2,182	2,188	-0.3%
Vested	1,052	1,061	
Not vested	1,130	1,127	
Average age (years)	44.67	44.95	-0.6%
Average service (years)	12.21	12.22	-0.1%
Average entry age (years)	32.46	32.73	-0.8%
Total employee contributions with interest	\$5,186,854	\$5,178,077	0.2%
Average employee contributions with interest	\$2,377	\$2,367	0.4%
Retirees			
Number	990	931	6.3%
Average age (years)	69.38	69.38	0.0%
Total annual benefits	\$3,538,467	\$3,300,122	7.2%
Average annual benefit	\$3,574	\$3,545	0.8%
Beneficiaries			
Number	190	175	8.6%
Average age (years)	71.48	70.15	1.9%
Total annual benefits	\$455,408	\$419,917	8.5%
Average annual benefit	\$2,397	\$2,400	-0.1%
Participants due refunds	1,245	1,184	5.2%

# Distribution of Male Active Members by Age and by Years of Service

Average Age = 44.6 Average Service = 12.6

Age		Whole Years of Service at Valuation Date									
La	st Birthday	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Totals		
Less than 20	Count	12	-	-	-	-	-	-	12		
	Total Contributions	\$1,698	-	-	-	-	-	-	\$1,69		
	Avg. Contributions	\$141	-	-	-	-	-	-	\$14		
20-24	Count	65	4	-	-	-	-	-	6		
	Total Contributions	17,794	\$3,121	-	-	-	-	-	20,91		
	Avg. Contributions	274	\$780	-	-	-	-	-	30		
25-29	Count	107	40	3	-	-	-	-	15		
	Total Contributions	30,450	41,546	\$5,782	-	-	-	-	77,77		
	Avg. Contributions	285	1,039	\$1,927	-	-	-	-	51		
30-34	Count	117	91	33	2	-	-	-	24		
	Total Contributions	38,813	99,113	68,497	\$6,147	-	-	-	212,56		
	Avg. Contributions	332	1,089	2,076	\$3,073	-	-	-	87		
35-39	Count	93	74	49	23	2	=	-	24		
	Total Contributions	30,438	87,582	106,790	73,922	\$5,800	-	-	304,53		
	Avg. Contributions	327	1,184	2,179	3,214	\$2,900	=	-	1,26		
40-44	Count	69	44	48	41	24	5	-	23		
	Total Contributions	21,898	49,507	108,757	136,295	106,319	\$26,876	-	449,65		
	Avg. Contributions	317	1,125	2,266	3,324	4,430	\$5,375	-	1,94		
45-49	Count	38	59	40	30	58	24	4	25		
	Total Contributions	12,705	68,900	87,861	101,306	274,097	141,476	\$32,951	719,29		
	Avg. Contributions	334	1,168	2,197	3,377	4,726	5,895	\$8,238	2,84		
50-54	Count	27	36	52	57	65	67	23	32		
	Total Contributions	8,658	52,104	110,410	193,649	308,521	394,692	162,068	1,230,10		
	Avg. Contributions	321	1,447	2,123	3,397	4,746	5,891	7,046	3,76		
55-59	Count	23	31	30	31	83	113	69	38		
	Total Contributions	8,515	38,739	66,889	107,125	381,214	659,808	514,474	1,776,76		
	Avg. Contributions	370	1,250	2,230	3,456	4,593	5,839	7,456	4,67		
60-64	Count	12	23	15	-	-	1	-	5		
	Total Contributions	5,110	29,834	35,885	-	-	5,276	-	76,10		
	Avg. Contributions	426	1,297	2,392	-	-	5,276	-	1,49		
65-69	Count	8	5	-	-	-	-	-	1		
	Total Contributions	1,748	7,611	-	-	-	-	-	9,35		
	Avg. Contributions	218	1,522	-	-	-	-	-	72		
70 & Over	Count	=	_	_	-	-	=	-	_		
	Total Contributions	-	_	_	-	-	-	-	_		
	Avg. Contributions	_	-	-	-	-	-	-	_		
Totals	Count	571	407	270	184	232	210	96	1,97		
20000	Total Contributions	\$177,827	\$478,058	\$590,871	\$618,444	\$1,075,950	\$1,228,129	\$709,492	\$4,878,77		
	Avg. Contributions	\$311	\$1,175	\$2,188	\$3,361	\$4,638	\$5,848	\$7,391	\$2,47		

## Distribution of Female Active Members by Age and by Years of Service

Average Age = 45.6 Average Service = 8.2

	Age	Whole Years of Service at Valuation Date								
Last Birthday		0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Totals	
Less than 20	Count	1	-	-	-	-	-	-		
	Total Contributions	\$204	-	-	-	-	-	-	\$20	
	Avg. Contributions	\$204	=	-	-	-	=	=	\$20	
20-24	Count	10	2	-	-	-	-	-	1	
	Total Contributions	1,714	\$1,769	-	-	-	-	-	3,48	
	Avg. Contributions	171	\$884	-	-	-	-	-	29	
25-29	Count	9	2	-	-	-	-	-	1	
	Total Contributions	2,172	2,344	-	-	-	-	-	4,51	
	Avg. Contributions	241	1,172	-	-	-	=	-	41	
30-34	Count	22	7	2	-	-	-	-	3	
	Total Contributions	6,417	7,993	\$4,601	-	-	-	-	19,01	
	Avg. Contributions	292	1,142	\$2,301	-	-	-	-	61	
35-39	Count	16	2	2	1	-	-	-	2	
	Total Contributions	4,574	2,393	4,358	\$3,243	-	-	-	14,56	
	Avg. Contributions	286	1,196	2,179	\$3,243	-	-	-	69	
40-44	Count	14	6	5	-	1	-	-	2	
	Total Contributions	4,709	6,771	12,277	-	\$4,585	-	-	28,34	
	Avg. Contributions	336	1,128	2,455	-	\$4,585	-	-	1,09	
45-49	Count	4	6	4	1	-	-	1	1	
	Total Contributions	1,308	5,997	9,051	3,233	-	-	\$7,130	26,72	
	Avg. Contributions	327	1,000	2,263	3,233	-	-	\$7,130	1,67	
50-54	Count	9	8	3	1	1	6	-	2	
	Total Contributions	2,273	9,348	6,766	3,081	4,397	\$32,722	-	58,58	
	Avg. Contributions	253	1,168	2,255	3,081	4,397	\$5,454	-	2,09	
55-59	Count	7	10	6	8	8	6	1	4	
	Total Contributions	2,346	11,656	13,988	27,024	35,673	34,342	7,214	132,24	
	Avg. Contributions	335	1,166	2,331	3,378	4,459	5,724	7,214	2,87	
60-64	Count	6	5	4	-	-	-	-	1	
	Total Contributions	2,481	5,798	8,198	-	-	-	-	16,47	
	Avg. Contributions	413	1,160	2,050	-	-	-	-	1,09	
65-69	Count	1	3	-	-	-	-	-		
	Total Contributions	63	3,665	-	-	-	-	-	3,72	
	Avg. Contributions	63	1,222	-	-	-	-	-	93	
70 & Over	Count	1	-	-	-	-	-	-		
	Total Contributions	204	-	-	-	-	-	-	20	
	Avg. Contributions	204		<u>-</u>		<u> </u>	<u> </u>	-	20	
Totals	Count	100	51	26	11	10	12	2	21	
	Total Contributions	\$28,465	\$57,733	\$59,239	\$36,582	\$44,656	\$67,064	\$14,344	\$308,08	
	Avg. Contributions	\$285	\$1,132	\$2,278	\$3,326	\$4,466	\$5,589	\$7,172	\$1,45	

### Distribution of Total Active Members by Age and by Years of Service

Average Age = 44.7 Average Service = 12.2

	Age	Whole Years of Service at Valuation Date								
Last Birthday		0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Totals	
Less than 20	Count	13	-	-	-	-	-	-	1	
	Total Contributions	\$1,902	-	-	-	-	-	-	\$1,90	
	Avg. Contributions	\$146	-	-	-	-	-	-	\$14	
20-24	Count	75	6	-	-	-	-	-	8	
	Total Contributions	19,508	\$4,890	-	-	-	-	-	24,39	
	Avg. Contributions	260	\$815	-	-	-	-	-	30	
25-29	Count	116	42	3	-	-	-	-	16	
	Total Contributions	32,622	43,890	\$5,782	-	-	-	-	82,29	
	Avg. Contributions	281	1,045	\$1,927	-	-	-	-	51	
30-34	Count	139	98	35	2	-	-	-	27	
	Total Contributions	45,230	107,106	73,098	\$6,147	-	-	-	231,58	
	Avg. Contributions	325	1,093	2,089	\$3,073	-	-	-	84	
35-39	Count	109	76	51	24	2	-	-	26	
	Total Contributions	35,012	89,975	111,149	77,165	\$5,800	-	-	319,10	
	Avg. Contributions	321	1,184	2,179	3,215	\$2,900	-	-	1,21	
40-44	Count	83	50	53	41	25	5	-	25	
	Total Contributions	26,607	56,277	121,034	136,295	110,904	\$26,876	-	477,99	
	Avg. Contributions	321	1,126	2,284	3,324	4,436	\$5,375	-	1,86	
45-49	Count	42	65	44	31	58	24	5	26	
	Total Contributions	14,013	74,897	96,912	104,540	274,097	141,476	\$40,081	746,01	
	Avg. Contributions	334	1,152	2,203	3,372	4,726	5,895	\$8,016	2,77	
50-54	Count	36	44	55	58	66	73	23	35	
	Total Contributions	10,931	61,452	117,176	196,730	312,919	427,414	162,068	1,288,68	
	Avg. Contributions	304	1,397	2,130	3,392	4,741	5,855	7,046	3,63	
55-59	Count	30	41	36	39	91	119	70	42	
	Total Contributions	10,861	50,395	80,877	134,150	416,887	694,150	521,688	1,909,00	
	Avg. Contributions	362	1,229	2,247	3,440	4,581	5,833	7,453	4,48	
60-64	Count	18	28	19	-	-	1	-	6	
	Total Contributions	7,591	35,632	44,084	-	-	5,276	-	92,58	
	Avg. Contributions	422	1,273	2,320	-	-	5,276	-	1,40	
65-69	Count	9	8	-	-	-	-	-	1	
	Total Contributions	1,811	11,276	-	-	-	-	-	13,08	
	Avg. Contributions	201	1,409	-	-	-	-	-	77	
70 & Over	Count	1	-	-	-	-	-	-		
	Total Contributions	204	-	-	-	-	-	-	20	
	Avg. Contributions	204	<u> </u>	<u> </u>			<u> </u>	-	20	
Totals	Count	671	458	296	195	242	222	98	2,18	
	Total Contributions	\$206,291	\$535,791	\$650,111	\$655,026	\$1,120,606	\$1,295,193	\$723,836	\$5,186,85	
	Avg. Contributions	\$307	\$1,170	\$2,196	\$3,359	\$4,631	\$5,834	\$7,386	\$2,37	

# Schedule of Pension Recipients Added to and Removed from Rolls

							Percent	
Fiscal Year	Added	d to Rolls	Remove	Removed from Rolls		Total Total	Increase in	Average
Ending December		Annual Pension		Annual Pension	-	Annual Pension	Annual Pension	Annual Pension
31	Count	Benefits	Count	Benefits	Count	Benefits	Benefits	Benefit
2008	67	\$226,304	17	\$11,056	848	\$2,721,564	9.55%	\$3,209
2009	76	258,300	26	70,754	898	2,909,410	7.00%	3,240
2010	78	286,896	17	44,650	959	3,151,656	8.00%	3,286
2011	78	288,302	21	60,217	1,016	3,379,741	7.24%	3,327
2012	119	419,427	29	79,129	1,106	3,720,039	10.07%	3,364
2013	100	350,541	26	76,706	1,180	3,993,874	7.36%	3,385

# Retirees by Amount and Age

Males	Age Last Birthday						
Benefit Amount	Under 60	60-64	65-69	70-74	75-79	80 & over	Total
Under \$50	-	-	-	-	-	-	-
<b>\$50 - 99</b>	-	-	-	1	1	_	2
<b>\$100 - 149</b>	-	1	4	9	3	-	17
<b>\$150 - 199</b>	-	22	30	22	11	25	110
\$200 - 249	-	35	40	40	42	38	195
\$250 - 299	-	54	54	30	14	11	163
\$300 - 349	-	81	61	16	7	14	179
\$350 - 399	-	31	18	14	12	4	79
\$400 & Over	-	86	39	27	19	1	172
Total	-	310	246	159	109	93	917
Females							
Benefit Amount	Under 60	60-64	65-69	70-74	75-79	80 & over	Total
Under \$50	-	-	-	-	-	-	-
<b>\$50 - 99</b>	-	-	-	-	-	-	-
<b>\$100 - 149</b>	-	-	-	6	1	-	7
<b>\$150 - 199</b>	-	1	2	2	2	3	10
\$200 - 249	-	3	6	4	5	-	18
\$250 - 299	-	9	5	4	-	-	18
\$300 - 349	-	9	2	3	1	-	15
\$350 - 399	-	2	-	-	-	-	2
\$400 & Over	-	2	1	-	-	-	3
Total	-	26	16	19	9	3	73
Males & Females							
Benefit Amount	Under 60	60-64	65-69	70-74	75-79	80 & over	Total
Under \$50	-	-	-	-	-	-	-
<b>\$50 - 99</b>	-	-	-	1	1	-	2
<b>\$100 - 149</b>	-	1	4	15	4	-	24
<b>\$150 - 199</b>	-	23	32	24	13	28	120
\$200 - 249	-	38	46	44	47	38	213
\$250 - 299	-	63	59	34	14	11	181
\$300 - 349	-	90	63	19	8	14	194
\$350 - 399	-	33	18	14	12	4	81
\$400 & Over	-	88	40	27	19	1	175
Total	-	336	262	178	118	96	990

# Beneficiaries by Amount and Age

Males	Age Last Birthday								
Benefit Amount	Under 50	50-54	55-59	60-64	65-69	70-74	75-79	80 & over	Total
Under \$50	-	-	-	-	-	-	-	-	-
<b>\$50 - 99</b>	-	-	-	1	-	-	-	-	1
\$100 - 149	-	-	1	-	-	1	-	-	2
<b>\$150 - 199</b>	-	-	-	-	-	-	1	-	1
\$200 - 249	-	-	1	-	-	-	-	1	2
\$250 - 299	-	-	-	1	-	-	-	-	1
\$300 - 349	-	-	-	-	-	-	1	-	1
\$350 - 399	-	-	-	-	-	-	-	-	-
\$400 & Over	-	-	-	-	-	-	-	-	-
Total	-	-	2	2	-	1	2	1	8
Females									
Benefit Amount	Under 50	50-54	55-59	60-64	65-69	70-74	75-79	80 & over	Total
Under \$50	-	-	-	-	-	-	-	1	1
<b>\$50 - 99</b>	-	-	-	-	-	-	1	2	3
<b>\$100 - 149</b>	1	-	3	1	2	5	7	34	53
<b>\$150 - 199</b>	1	-	2	4	9	7	13	10	46
\$200 - 249	4	1	7	6	4	5	8	3	38
\$250 - 299	-	2	2	3	1	3	4	1	16
\$300 - 349	1	-	5	4	1	1	1	-	13
\$350 - 399	2	-	2	3	2	1	-	-	10
\$400 & Over	-	1	1	-	-	-	-	-	2
Total	9	4	22	21	19	22	34	51	182
Males & Females									
Benefit Amount	Under 50	50-54	55-59	60-64	65-69	70-74	75-79	80 & over	Total
Under \$50	-	-	-	-	-	-	-	1	1
<b>\$50 - 99</b>	-	-	-	1	-	-	1	2	4
<b>\$100 - 149</b>	1	-	4	1	2	6	7	34	55
<b>\$150 - 199</b>	1	-	2	4	9	7	14	10	47
\$200 - 249	4	1	8	6	4	5	8	4	40
\$250 - 299	-	2	2	4	1	3	4	1	17
\$300 - 349	1	-	5	4	1	1	2	-	14
\$350 - 399	2	-	2	3	2	1	-	-	10
\$400 & Over	-	1	1	-	-	-		<u>-</u>	2
Total	9	4	24	23	19	23	36	52	190

## **Pensions Awarded in 2013 by Status**

Average Age = 61.0

Males & Females		Status	
Benefit Amount	Retirees	Beneficiaries	Total
<b>Under \$200</b>	15	11	26
\$200-\$399	27	5	32
\$400-\$599	19	2	21
\$600-\$799	18	0	18
\$800-\$999	3	0	3
\$1,000-\$1,499	0	0	0
\$1,500-\$1,999	0	0	0
\$2,000-\$2,499	0	0	0
\$2,500 & over	0	0	0
Total	82	18	100
Males & Females			
Age Last Birthday	Retirees	Beneficiaries	Total
Under 50	0	1	1
50-54	0	0	0
55-59	0	3	3
60-64	76	2	78
65-69	4	0	4
70-74	2	3	5
75-79	0	3	3
80-84	0	3	3
85 & over	0	3	3
Total	82	18	100

## **Retirees by Service at Retirement and Years Since Retirement**

Average Service at Retirement = 18.9 Average Years Since Retirement = 8.5

Service at				Years E	lapsed Sin	ce Retirem	ent		
Retirement		0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Totals
Less than 5	Count	13	16	36	1	2	-	1	69
	Avg. Benefit	\$420	\$269	\$553	\$240	\$273	-	\$246	\$275
5-9	Count	23	11	7	12	14	-	-	67
	Avg. Benefit	\$140	\$148	\$166	\$181	\$188	-	-	\$161
10-14	Count	43	33	46	47	18	4	1	192
	Avg. Benefit	\$187	\$196	\$211	\$223	\$222	\$246	\$230	\$208
15-19	Count	54	67	37	16	12	8	1	195
	Avg. Benefit	\$245	\$247	\$274	\$280	\$289	\$280	\$270	\$258
20-24	Count	103	75	17	13	7	1	-	216
	Avg. Benefit	\$309	\$310	\$337	\$371	\$339	\$332	-	\$316
25-29	Count	82	38	10	21	1	-	-	152
	Avg. Benefit	\$381	\$385	\$417	\$427	\$416	-	-	\$391
30-34	Count	49	21	15	2	-	-	-	87
	Avg. Benefit	\$462	\$459	\$490	\$480	-	-	-	\$466
35 & Over	Count	9	2	1	-	-	-	-	12
	Avg. Benefit	\$529	\$555	\$690	-	-			\$547
Totals	Count	376	263	169	112	54	13	3	990
	Avg. Benefit	\$314	\$295	\$292	\$287	\$249	\$273	\$249	\$298

# **Retirees by Year of Retirement**

January 1, 2014 Total = 990

Year of Retirement	Count
<b>Under 1980</b>	-
1980	-
1981	-
1982	-
1983	3
1984	-
1985	2
1986	4
1987	2
1988	5
1989	6
1990	9
1991	12
1992	13
1993	14
1994	13
1995	20
1996	20

Year of Retirement	Count
1997	26
1998	33
1999	17
2000	32
2001	28
2002	49
2003	43
2004	44
2005	40
2006	56
2007	68
2008	55
2009	57
2010	68
2011	72
2012	103
2013	76



SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

### **Summary of Actuarial Assumptions and Methods**

The following methods and assumptions were used in preparing the January 1, 2014 actuarial valuation report.

#### 1. Valuation Date

The valuation date for any given year is January 1<sup>st</sup>, the first day of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

#### 2. Actuarial Cost Method

The actuarial valuation uses the Entry Age Normal (EAN) actuarial cost method, amortized as a level dollar amount. Under this method, the employer contribution amount is the sum of (i) the employer normal cost amount, and (ii) the amount that will amortize the unfunded actuarial accrued liability (UAAL).

- a. The valuation is prepared on the projected benefit basis, under which the present value, at the investment return rate assumed to be earned in the future (currently 7.75%), of each participant's expected benefit payable at retirement or death is determined, based on his/her age, service, and sex. The calculations take into account the probability of a participant's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, or survivor's benefit. The present value of the expected benefits payable for the active participants is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits payable from the Fund on account of the present group of participants and beneficiaries.
- b. The employer contributions required to support the benefits of the Fund are determined using a level funding approach, and consist of a normal cost contribution and an accrued liability contribution.
- c. The normal cost contribution is determined using the "entry age normal" actuarial cost method. Under this method, a calculation is made to determine the average uniform and constant employer contribution amount which, if applied to each new participant during the entire period of his/her anticipated covered service, would be required to meet the cost of all benefits payable on his/her behalf based on the benefits provisions applicable for the individual member.

d. The unfunded actuarial accrued liability contributions are determined by subtracting the actuarial value of assets from the actuarial accrued liability and amortizing the result over 30 years from the valuation date.

#### 3. Actuarial Value of Assets

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income, with interest, dividends, and other income recognized immediately. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses. An adjustment is made if the actuarial value is not within 20% of the Market Value. For any year following a year in which the 20% of market value adjustment was applied, the actuarial value is determined as if the adjustment was not applied in the previous year.

## 4. <u>Economic Assumptions</u>

Investment return: 7.75% per year, compounded annually, composed of an assumed 3.25% inflation rate and a 4.50% net real rate of return. This rate represents the assumed return, net of investment expenses.

**GRS** 

## 5. <u>Demographic Assumptions</u>

### a. Rates Before Retirement

Healthy Pre-Retirement Mortality:

RP-2000 Combined Mortality Table, fully generational, projected with Scale BB

Males: Set back 5 years with a multiplier of 104%

Females: Set back 4 years with a multiplier of 90%

Healthy Post-Retirement Mortality:

RP-2000 Combined Mortality Table, fully generational, projected with Scale BB

Males: Set back 1 year with a multiplier of 104% Females: Set back 0 years with a multiplier of 90%

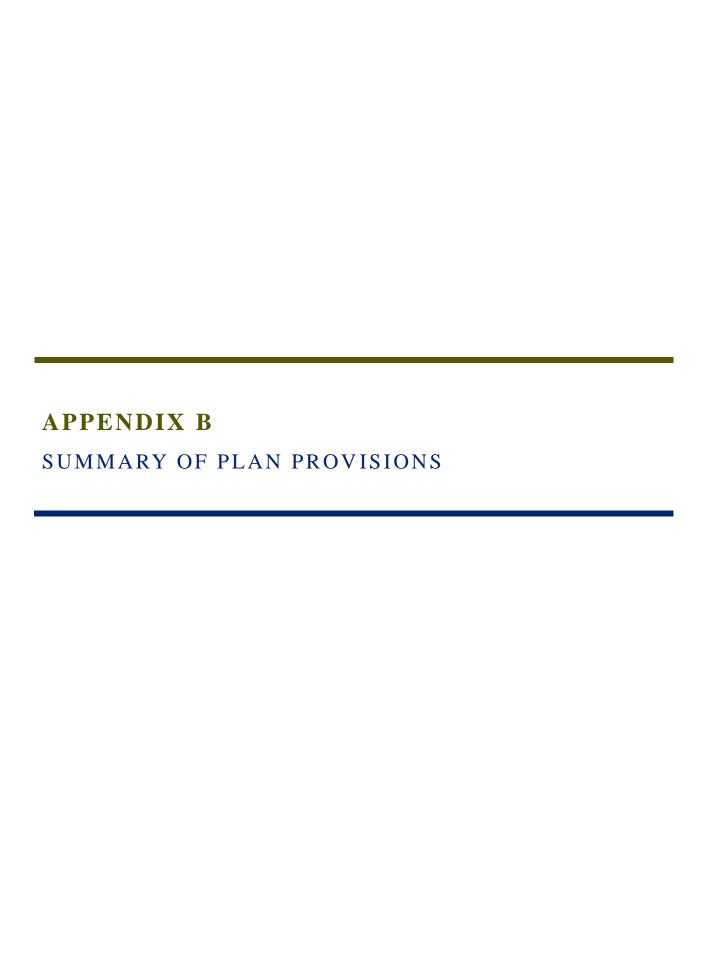
	Pre-Ret	irement	Post-Re	tirement	Witho	drawal	
		Projected to 2014	4 using Scale BB		Entry Age		
Age	Male	Female	Male	Female	<46	>45	
20	0.03%	0.02%	0.03%	0.02%	20.00%	N/A	
25	0.03%	0.02%	0.04%	0.02%	15.00%	N/A	
30	0.04%	0.02%	0.04%	0.02%	11.00%	N/A	
35	0.04%	0.03%	0.07%	0.04%	11.00%	N/A	
40	0.08%	0.04%	0.10%	0.06%	9.00%	N/A	
45	0.11%	0.07%	0.14%	0.10%	4.00%	15.00%	
50	0.15%	0.11%	0.20%	0.14%	3.00%	15.00%	
55	0.21%	0.16%	0.32%	0.23%	1.00%	8.00%	
60	0.36%	0.26%	0.57%	0.40%	0.00%	5.00%	
65	0.64%	0.45%	1.00%	0.74%	0.00%	5.00%	
70	1.12%	0.83%	1.67%	1.27%	0.00%	5.00%	
75			2.85%	2.14%	0.00%	5.00%	
80			4.88%	3.49%	0.00%	5.00%	
85			8.40%	5.89%	0.00%	5.00%	
90			14.62%	10.15%	0.00%	5.00%	
95			23.63%	16.09%	0.00%	5.00%	
100			32.93%	20.49%	0.00%	5.00%	

b. Retirement Rates: Members are assumed to retire at first eligibility.

#### 6. Other Assumptions

- a. Percent married: 85% of employees are assumed to be married. (No beneficiaries other than the spouse assumed.)
- b. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.
- c. Percent electing annuity on death (when eligible): All of the spouses of vested, married participants are assumed to elect an annuity.

- d. Administrative expenses: Average of actual expenses for the prior two years, with each year projected at 6.50% to the valuation date.
- e. Decrement timing: Decrements of all types are assumed to occur mid-year.
- f. Eligibility testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
- g. Incidence of contributions: Contributions are assumed to be received continuously throughout the year.
- h. Benefit service: All members are assumed to accrue one year of service each year. All members are assumed to have contributed at the \$10.00 per month for the period before July 1, 1989.
- i. Premium tax allocation: Provided by staff and based on booked total premium taxes.



## **Summary of Plan Provisions**

#### **Covered Members**

A volunteer fireman shall become a participating member in the pension plan for each month there is contributed by or on behalf of the member an amount of twelve dollars and fifty cents (\$12.50) per month.

## **Monthly Benefits**

As detailed in W.S. 35-9-608, eligibility and the monthly benefit payable for service retirement, the monthly benefit payable to the surviving spouse upon the member's death, and the monthly benefit payable to children under age 21 upon the member's and spouse's deaths are set forth in the table below. Members who only contributed \$5.00 per month for the period prior to July 1, 1989 accrue only ½ the benefit amount shown for that period of service. Total benefits paid shall not be less than \$5,000 or \$2,500 for members who contributed \$5.00 per month before July 1, 1989.

1				1					
Age at Entry	Retirement	Member	_		Age at Entry			Spouse	Children
into Plan	Age	Pension	Benefit	Benefit	into Plan	Age	Pension	Benefit	Benefit
15	60	691.44	460.96	230.48	41	60	253.36	168.91	84.45
16	60	673.46	448.97	224.49	42	60	240.29	160.19	80.10
17	60	655.48	436.99	218.49	43	60	227.21	151.47	75.74
18	60	637.50	425.00	212.50	44	60	214.13	142.76	71.38
19	60	619.52	413.01	206.51	45	60	201.06	134.04	67.02
20	60	601.54	401.02	200.51	46	61	201.06	134.04	67.02
21	60	583.56	389.04	194.52	47	61	192.88	128.59	64.29
22	60	565.58	377.05	188.53	48	62	192.88	128.59	64.29
23	60	547.59	365.06	182.53	49	62	184.71	123.14	61.57
24	60	529.61	353.08	176.54	50	63	184.71	123.14	61.57
25	60	510.82	340.54	170.27	51	63	176.54	117.69	58.85
26	60	493.65	329.10	164.55	52	64	176.54	117.69	58.85
27	60	475.67	317.11	158.56	53	64	168.36	112.24	56.12
28	60	457.69	305.13	152.56	54	65	168.36	112.24	56.12
29	60	439.71	293.14	146.57	55	65	160.19	106.79	53.40
30	60	421.73	281.15	140.58	56	66	160.19	106.79	53.40
31	60	403.75	269.17	134.58	57	66	152.02	101.35	50.67
32	60	385.77	257.18	128.59	58	67	152.02	101.35	50.67
33	60	367.79	245.19	122.60	59	67	143.85	95.90	47.95
34	60	349.81	233.20	116.60	60	68	143.85	95.90	47.95
35	60	331.83	221.22	110.61	61	68	135.67	90.45	45.22
36	60	318.75	212.50	106.25	62	69	135.67	90.45	45.22
37	60	305.67	203.78	101.89	63	69	127.50	85.00	42.50
38	60	292.60	195.06	97.53	64	70	127.50	85.00	42.50
39	60	279.52	186.35	93.17	65	70	119.33	79.55	39.78
40	60	266.44	177.63	88.81	1				

## Vesting

Eligibility 5 years of service if they became a member before February 5,

1993, or 10 years of service if they became a member on or after February 5, 1993 and terminate before their retirement age from

the table above.

Monthly Benefit Eligible members who terminate before their retirement age may

continue to make contributions to the plan until their retirement age. Upon reaching retirement age, the member would be eligible for the monthly benefit set forth in the table above. A member who does not meet the eligibility requirement is entitled to a

refund of contributions with interest.

#### **Pre-retirement Death Benefit**

Eligibility No age or service requirements.

Monthly Benefit A monthly benefit equal to the amount corresponding to the

spouse's benefit at the member's entry age from the table above, payable to the surviving spouse for their remaining lifetime. A lump sum payment of \$5,000, or \$2,500 for members who contributed \$5.00 per month before July 1, 1989, less the amount of monthly benefits paid to the surviving spouse will also be paid

to the estate of the spouse upon the spouse's death.

**Contributions** 

Employee \$12.50 per month.

State 50% of gross fire insurance premium taxes paid on fire insurance

policies in Wyoming.

Interest 3.00% annually.

Cost-of-Living Improvements W.S. 9-3-454 prohibits benefit changes, including cost-of-living

increases, unless the funded ratio stays above 100% plus a margin for

adverse experience throughout the life of the benefit change.